WHAT IS CLAIMED IS:

1. A synchronizing position detecting circuit comprising:

a window size determining circuit for calculating, a moved distance of a mobile station during a sleep time based on a moving speed of the mobile station and the sleep time of an intermittent reception, the determining circuit selecting a window size based on a phase change of a distance signal including a code corresponding to the moved distance;

a synchronizing code generating circuit for repeatedly producing a synchronizing code that coincides with a part of the code of the distance signal, the code generating circuit successively shifting a phase of the synchronizing code by a predetermined phase width so as to shift the window size;

a correlation circuit for calculating a correlation function between the synchronizing code and the distance signal; and

a synchronizing position determining circuit for determining a correlation function having a maximum value to detect the distance signal, the position determining circuit outputting a synchronizing position signal representing a detecting position.

2. A synchronizing position detecting circuit according to claim 1, wherein when the synchronizing position signal is outputted from said synchronizing position determining circuit, the synchronizing code generating

circuit synchronizes a phase of the synchronizing code with a phase of the distance signal based on the synchronizing position signal.

3. A synchronizing position detecting circuit according to claim 1, wherein the window size determining circuit selects a window size from a plurality of predetermined window sizes.

4. A synchronizing position detecting circuit according to claim 1, wherein the window size determining circuit selects a window size based on a phase change of the distance signal corresponding to the moved distance and a phase change of the synchronizing code.

5. A synchronizing position detecting circuit according to claim 4, wherein the phase change of the synchronizing code is caused during one sleep time due to an error of the synchronizing code generating circuit.

6. A synchronizing position detecting circuit according to claim 1, wherein the synchronizing position determining circuit judges that the distance signal is detected when the correlation function calculated by the correlation means exceeds a threshold value.

7. A synchronizing position detecting circuit according to claim 1, wherein the synchronizing position detecting circuit is incorporated into a receiving device of the mobile station.

8. A synchronizing position detecting circuit comprising:

a distance estimating circuit for calculating a distance change in straight line between a base station and a mobile station caused by movement of the mobile station during a sleep time as an estimated distance based on position information of the base station and the mobile station and a sleep time of an intermittent reception;

a window size determining circuit for selecting a window size based on a phase change of a distance signal corresponding to the estimated moved distance;

a synchronizing code generating circuit for repeatedly producing a synchronizing code that coincides with a part of the code of the distance signal, the code generating circuit successively shifting a phase of the synchronizing code by a predetermined phase width so as to shift the window size;

a correlation circuit for calculating a correlation function between the synchronizing code and the distance signal; and

a synchronizing position determining circuit for determining a correlation function having a maximum value to detect the distance signal, the position determining circuit outputting a synchronizing position signal representing a detecting position.

9. A synchronizing position detecting circuit according to claim 8, wherein when the synchronizing position signal is outputted from said synchronizing position determining circuit, the synchronizing code generating

circuit synchronizes a phase of the synchronizing code with a phase of the distance signal based on the synchronizing position signal.

10. A synchronizing position detecting circuit according to claim 8, wherein the window size determining circuit selects a window size from a plurality of predetermined window sizes.

11. A synchronizing position detecting circuit according to claim 8, wherein the window size determining circuit selects a window size based on a phase change of the distance signal corresponding to the moved distance and a phase change of the synchronizing code.

12. A synchronizing position detecting circuit according to claim 11, wherein the phase change of the synchronizing code is caused during one sleep time due to an error of the synchronizing code generating circuit.

13. A synchronizing position detecting circuit according to claim 8, wherein the synchronizing position determining circuit judges that the distance signal is detected when the correlation function calculated by the correlation means exceeds a threshold value.

14. A synchronizing position detecting circuit according to claim 8, wherein the synchronizing position detecting circuit is incorporated into a receiving device of the mobile station.